

Application Number 10/644,484

Amendment in response to Office Action mailed May 12, 2008

REMARKS

This Amendment is responsive to the Office Action dated May 12, 2008. Applicant has amended claims 1, 11, 15, 23, 27, 28 and 30. Applicant has canceled claim 29. Claims 2-6, 10, 14, 16-18, 21-22, 24, and 26 were previously canceled. Claims 1, 7-9, 11-13, 15, 19-20, 23, 25 and 27, 28 and 30 are now pending.

In the Office Action, the Examiner rejected claims 1, 7-9, 11-13, 15, 19-20, 23, 25, 27-30 under 35 U.S.C. 103(a) as being unpatentable over Kaneko (US 2003/0221066) in view of Liu (6,695,637 B1). Applicant respectfully traverses the rejections for a number of reasons addressed in greater detail below. Nevertheless, in the interest of advancing prosecution of this application, Applicant has made further clarifying amendments to the independent claims in order to better distinguish the prior art applied by the Examiner.

All of the pending claims concern memory cards that include two different connectors, e.g., a first connector that conforms to a host computer connector (HCC) standard and a second connector that conforms to a device communication connector (DCC) standard. According to all pending claims, at least one of these connectors is a retractable connector that can be positioned in an extended position and a retracted position. Furthermore, in the current claim amendments, Applicant has further clarified that the retractable connector retracts linearly within a slot of the memory card from the extended position to the retracted position along an axis parallel to an edge of the memory card. The illustrations of FIGS. 8-10 of the present application provide clear support for the new claim language. In particular, FIGS. 8-10 clearly illustrate retractable host connectors that retract linearly within a slot along an axis parallel to an edge of the memory card

In the Office Action, the Examiner recognized that Kaneko fails to suggest a retractable connector. However, the Examiner indicated that Liu teaches a retractable connector. The Examiner stated that it would have been obvious to modify the device of Kaneko to provide a retractable connector like that of Liu.

The current claim amendments further distinguish the pending claims from the retractable connector of Liu insofar as the current claim amendments require the retractable connector to retract linearly within a slot of the memory card from the extended position to the retracted position along an axis parallel to an edge of the memory card. In contrast to this feature, the retractable connector of Liu is a USB connector that rotates ninety degrees to expose the

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connector or encase the connector within the housing of the memory card. Given the clarification to the claims, the pending claims are now more distinguishable from the applied prior art. Accordingly, on this basis, reconsideration and allowance of all pending claims is courteously solicited.

Notwithstanding Applicant's willingness to amend the claims at this time, Applicant still disagrees with many aspects of the Examiner's analysis, and requests further reconsideration. In particular, Applicant reiterates all of the arguments advanced in the previous response relative to the teachings of Kaneko. Even though the new Office Action advanced new grounds of rejection, Applicant respectfully submits that many of the same erroneous interpretations of Kaneko, which were discussed in the previous response, were used again by the Examiner in the current Office Action. Accordingly, Applicant preserves all of the arguments from the previous response for Appeal, if an Appeal becomes necessary.

In addition to the Arguments above, and the numerous arguments advanced in the previous response relative to the Kaneko reference, Applicant also respectfully traverses the Examiner's position that a person of ordinary skill in the art would have been motivated to modify the device of Kaneko to include a retractable connector like that of Liu. Applicant respectfully submits that such modifications to the device of Kaneko would have been irrational. Indeed, the modifications to the device of Kaneko proposed by the Examiner appear to be based on hindsight and not any rational position that could be attributed to a person of ordinary skill in the art at the time of Applicant's invention. The Examiner is merely reconstructing the claimed invention from disparate prior art teachings in a manner that would never have been considered or implemented by a person of ordinary skill in the art at the time of Applicant's invention.

For example, the memory cards of Kaneko describe and illustrate connectors that are formed on opposing sides of a printed circuit board. The notion that a person of ordinary skill in the art would have found reason to modify one of the connectors of Kaneko, which are formed on a printed circuit board, with a rotating USB interface, is incorrect. The rotating USB interface of Liu would be incompatible with connector 23 of Kaneko. The relevant illustrations of Kaneko and Liu are reproduced below.

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FIG. 3 from Kaneko is reproduced below.

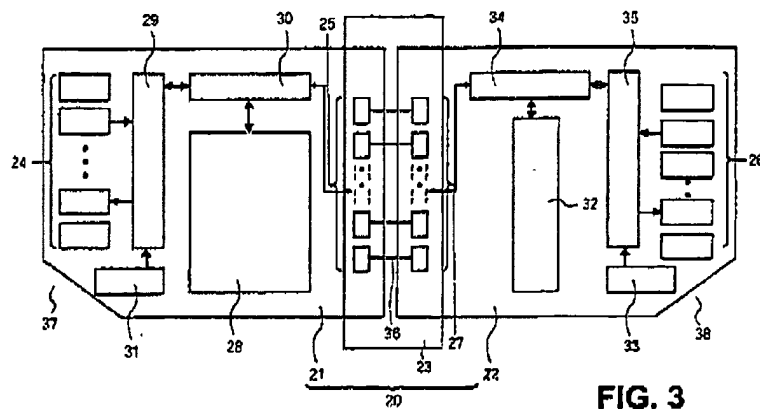
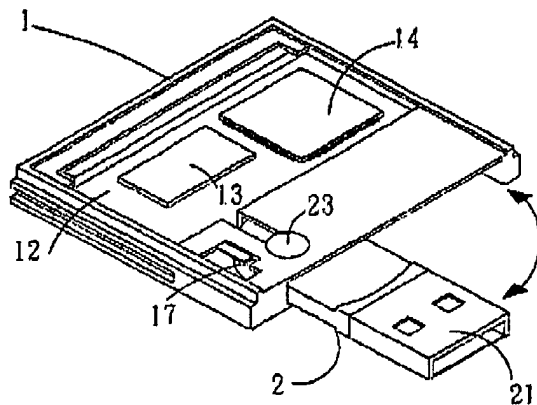


FIG. 3

The relevant portion of FIG. 3 of Liu is reproduced below.



In Kaneko, connector 23 facilitates the connection of two different memory cards, i.e., card 21 and 22. The two different memory cards 21 and 22 of Kaneko have connectors on printed circuit boards that are designed for compatibility with connector 23. If a person of ordinary skill in the art were to have modified the memory cards of Kaneko to have a rotating USB interface 21, this rotating USB interface would appear to frustrate the goals of Kaneko by rendering connector 23 unusable for its intended purpose. In particular, the memory cards 21 and 22 of Kaneko could not use a USB interface like that of Liu in order to couple the memory cards to one another via connector 23. In this case, the ability to transfer data between memory devices using connector 23, as contemplated by Kaneko, would be frustrated if such modifications were made to Kaneko according to the Examiner's proposal.

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In the Office Action, the Examiner indicated that:

The suggestion or motivation for [making a memory card of Kaneko such that it contains the retractable connector of Liu] would have been obvious in view of the teaching of Liu to have an electrical connector extending from the rear of the drive which engages a mating electrical connector located in the rear of the bay.

This statement by the Examiner, however, is nothing more than a discussion of the feature of Liu, and sheds no insight on how or why a person of ordinary skill in the art would have even considered it desirable to modify the device of Kaneko to include this feature. Indeed, as noted above, these proposed modifications to the device of Kaneko would appear to frustrate the goals of Kaneko rather than provide any useful advantages to the device of Kaneko. It is entirely unclear how the device of Kaneko would benefit by having a retractable connector like that of Liu, and the Examiner provided no evidence that would support an assertion that it would have been obvious to make this modification to Kaneko at the time of Applicant's invention. Indeed, the evidence points to the exact contrary, i.e., that the proposed modifications to the device of Kaneko would degrade the device of Kaneko, or worse yet, render the memory card of Kaneko incompatible with connector 23.

Furthermore, the purported motivation cited by the Examiner actually demonstrates that the Examiner merely reconstructed the claimed invention from the prior art based on hindsight. In particular, the Examiner provided no evidence that a person of ordinary skill in the art would have found any reason to modify the device of Kaneko, much less provide a retractable connector like that of Liu in the device of Kaneko. Instead, the purported motivation cited by the Examiner is simply a discussion of the feature described by Liu, but sheds no insight on why this feature (a rotating USB tab) would be desired to replace contacts of a memory card of Kaneko, which are fixed on a circuit board. Again, the connector of Liu appears to be totally incompatible with other components of Kaneko, including connector 23.

Liu describes a device that has an electrical USB connector that extends in a rotating fashion to mate with an electrical connector of a bay. The facts surrounding the device of Liu, however, shed absolutely no insight on how or why it would have been desirable to modify the device of Kaneko. The Examiner merely plucked features from the prior art teachings to reconstruct the features of Applicant's claimed invention based on contrivance, and not based on

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any rational reason that could be attributed to a person of ordinary skill in the art at the time of Applicant's invention.

In any case, given the current claim amendments, which further distinguish Liu by requiring the retractable connector to retract linearly within a slot of the memory card from the extended position to the retracted position along an axis parallel to an edge of the memory card, Applicant believes that the comments herein regarding Kaneko and Liu should be moot. Applicant is highlighting such arguments at this time simply to preserve such arguments for Appeal, just in case an Appeal becomes necessary.

With regard to dependent claim 11, Applicant respectfully submits that the Examiner's position is inapposite. Claim 11 is dependent upon claim 1 and recites a housing defining the slot for the retractable connector, and a first electrical contact on the retractable connector and a second electrical contact within the slot, wherein the first electrical contact couples to the second electrical contact when the retractable connector is extended from the slot. As noted above, the Examiner recognized that Kaneko fails to disclose or suggest a retractable connector, but cited Liu for this feature. In the analysis of claim 11, which further defines features of the retractable connector, however, the Examiner cited to passages of Kaneko. Accordingly, the Examiner's position regarding claim 11 is inconsistent with the Examiner's admission that Kaneko fails to disclose or suggest a retractable connector. Indeed, the analysis of claim 11 fails to identify anything in the prior art that suggests a first electrical contact on the retractable connector and a second electrical contact within the slot, wherein the first electrical contact couples to the second electrical contact when the retractable connector is extended from the slot, as required by claim 11.

As a final note, Applicant also respectfully takes issue with the Examiner's analysis of claim 28. Claim 28 specifically requires the first and second connectors to be formed along a common side of the memory card and further requires the electrical contacts of the second connector to comprise a subset of electrical contacts of the first connector. Such features are illustrated e.g., in FIGS 11 and 12 of the present application.

The Examiner failed to identify the features of claim 28 anywhere in the prior art. With regard to claim 28, the Examiner merely stated "explain in claim 1" and cited connectors 25 and 27 of FIG. 3 of Kaneko, reproduced above. These comments by the Examiner, however, do not

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demonstrate that the features of claim 28 are disclosed or suggested by Kaneko. In particular, the Examiner's comments and elements cited from Kaneko are clearly insufficient to support any assertion that Kaneko suggests first and second connectors formed along a common side of the memory card, wherein the electrical contacts of the second connector comprise a subset of electrical contacts of the first connector. These features of claim 28 (see also dependent claims 12 and 13) are not disclosed or suggested anywhere in the applied prior art. Again, such features are illustrated e.g., in FIGS 11 and 12 of the present application.

CONCLUSION

All claims in this application are in condition for allowance. Applicant respectfully requests reconsideration and prompt allowance of all pending claims. Please charge any additional fees or credit any overpayment to deposit account number 09-0069. The Examiner is invited to telephone the below-signed attorney to discuss this application.

Date:

8/7/8

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